



SUBSTITUTE SPECIFICATION IN
CLEAN FORM WITHOUT MARKINGS
AS TO AMENDED MATERIAL
PURSUANT TO 37 CFR § 1.125(c)

ATTORNEY DOCKET: 13867 B

CHRISTMAS TREE STRUCTURE OF DECORATING LAMPS

BACKGROUND OF THE INVENTION

Field of the Invention:

The present invention relates to a Christmas tree structure of decorating lamps, and more particularly, to Christmas tree-shaped decorating lamps without an exposed cord.

Description of the Prior Art:

A conventional Christmas tree comprised of several branches and a main trunk has attached thereto a string of decorating lamps. The branches branch out from the main trunk in a radial fashion and the string of decorating lamps are put over the branches by the user requiring much time and labor, with larger Christmas trees being more difficult. The string of decorating lamps that are hung over the tree are exposed and make the Christmas tree a fearful mess especially in daytime, which not only affects its appearance, but also its value.

A string of decorating lamps whose cords are hidden in the tree's branches and trunk is referred to in USA Patent No.: 6,030,670 and Chinese Patent No.: CN97224263.5 and CN97884560.X, in which the shortcomings such as messy appearance caused by the exposed

- 1 cords and the much time and labor required to put the cords over have been overcome. Such,
- 2 however, is not suited for locating a string of decorating lamps over an artificial Christmas
- 3 tree, it does not have a hollow inside for hiding the cords of the string of decorating lamps in.

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OBJECTS AND SUMMARY OF THE INVENTION

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It is therefore a main object of the present invention to provide a Christmas tree structure of decorating lamps which can hide most of its cords so as to improve its appearance and valuation.

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It is another object of the present invention to provide a Christmas tree structure of decorating lamps in which the string of decorating lamps can be pre-located on the branches for avoiding the trouble of wiring the cords by the user.

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It is another object of the present invention to provide a Christmas tree structure of decorating lamps in which a local connection unit is built coordinating to the number and position of the branch pre-attached with decorating lamps for plugging in or out so as to make storing and transporting more convenient.

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The present invention is comprised of a proper number of segments, wherein each segment includes more than one palm-shaped branch in which the cords are located and hidden on a core shaft by wrapping a belt to fasten a cluster of the needle-shaped leaves simultaneously or by binding a cluster of the needle-shaped leaves with the cords molded directly thereinto simultaneously to construct a basic unit of the Christmas tree-shaped decorating lamps to meet the functions of improving valuation and facility of transportation.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to Fig. 1 and Fig. 2, several palm-shaped branches 32 are built on a cord 31 of a string of decorating lamps 3 provided by the present invention. In a tip end of a branch 32, a bulb 33 is connected in electric connection. A lamp-holder of the bulb 33 has a retainer 331 for fastening on a cluster of needle-shaped leaves 22. The cords 31 coordinating to a core shaft 21 of a branch are hidden by binding a belt 4 to fasten the cluster of needle-shaped leaves 22 on the core shaft 21 of a branch 32 simultaneously. The cord 31 of the decorating lamps 3 has a plug 34 and a socket 35 connected on ends thereof, respectively, for series connection, thereby extending the Christmas tree by adding more than one unit of the branches 32 in series connection to meet the necessary length of the branches 32 in each segment.

Referring to Fig. 3 and Fig. 4, a first embodiment of the present invention is shown. The palm-shaped branches 32 of the string of decorating lamps 3 are arranged in a horizontal array around a trunk 1, in a stepped construction from a bottom to a top circularly and upwardly or from the top to the bottom. In each level, the branches 32 are retained on the trunk 1. The string of decorating lamps 3 of each level, via the plug 34 connecting with the cords 31, connect to a power source on the trunk 1 or the socket 35 located on a last level.

In a second embodiment shown in Fig. 5, the palm-shaped branches 32 of the string of decorating lamps 3 are arranged in a vertical array along the trunk 1. Each of them is retained at a different level, but in a same orientation around the trunk 1, and by the plugs 34 and the sockets 35 they are connected in a series connection.

1 For convenience of knocked-down shipping and reinstalling of the branches 32 with
2 the trunk 1, all or part of the palm-shaped branches 32 of the string of decorating lamps 3 in
3 a same branch 32 consist of a local connection unit, or all or part in the same orientation
4 consist of a local connection unit in the branch 32. Due to the local connection units, the
5 whole tree can be taken apart for shipping so that production cost is reduced, and the user just
6 needs to reinstall every local connection unit following a diagram, then cut in the power source
7 at the desired site.

8 Referring to Fig. 1 to Fig. 5, the lamp-holder holding the bulb 33 has the retainer 331
9 for fastening on the tip end of the cluster of needle-shaped leaves 22, and the cords 31
10 coordinating to the needle-shaped leaves 22 of the palm-shaped branch 32 can be hidden or
11 hung over the bottom side of the cluster of needle-shaped leaves 22.